

## CLAIMS

1. A method of preparing a silicate-based foam, characterized in that silicate is supplied to a mixer under pressure, to which mixer  
5 also a carrier gas is supplied under pressure, with intense mixing of the silicate and the carrier gas being effected in the mixer, after which a foam of carrier gas and silicate is delivered via an outlet opening of the mixer.
2. A method according to claim 1, characterized in that the  
10 carrier gas is selected from a group consisting of oxygen, nitrogen, air, carbon dioxide and carbon monoxide, or a combination of one or more thereof.
3. A method according to claim 2, characterized in that air is used as the carrier gas.
- 15 4. A method according to any one or more of the preceding claims, characterized in that sodium silicate is used as the silicate.
5. A method according to any one or more of the preceding claims, characterized in that one or more additives selected from the group consisting of surfactants, colorants, aromatics, foam stabilising  
20 agents, cleaning agents, fire resistance-increasing agents, insecticides, acids and bonding agents are added to the silicate.
6. A method according to claim 5, characterized in that one or more surfactants are used.
7. A method according to any one or more of the preceding  
25 claims, characterized in that the mixer is tubular.
8. A method according to any one or more of the preceding claims, characterized in that the mixer is internally provided with obstruction means, which effect an intense mixing of silicate and carrier gas.
- 30 9. A method according to any one of the preceding claims, characterized in that the metering of silicate takes place downstream of

the location where the metering of the carrier gas takes place.

10. A foam obtained by carrying out the method as defined in any one or more of the preceding claims.

11. A foam with a base of a carrier gas and a silicate.

5 12. A foam according to claim 11, characterized in that the carrier gas has been selected from the group consisting of oxygen, nitrogen, air, carbon dioxide and carbon monoxide or a combination of one or more thereof.

10 13. A foam according to claim 12, characterized in that air is used as the carrier gas.

14. A foam according to any one or more of the preceding claims 11-13, characterized in that sodium silicate is used as the silicate.

15 15. A foam according to any one or more of the preceding claims 11-14, characterized in that the foam furthermore contains one or more additives selected from the group consisting of surfactants, colorants, aromatics, foam stabilising agents, cleaning agents, fire resistance-increasing agents, insecticides, acids and bonding agents.

16. Use of a foam according to any one or more of the preceding claims 10-15 as an adhesive.

20 17. Use of a foam according to any one or more of the preceding claims 10-15 as a fire retardant.

18. Use of a foam according to any one or more of the preceding claims 10-15 as a moisture repellent.

25 19. Use of a foam according to any one or more of the preceding claims 10-15 as a binder.

20. Use of a foam according to any one or more of the preceding claims 10-15 as an impregnating agent.